TRAVELING EXHIBITS Program

National Aeronautics and Space Administration

Langley Research Center Hampton, Virginia 23681-2199



757 Cockpit Exhibit

757 and NASA Langley Research Center

A 757 serves NASA as a second generation flying laboratory. The "flying lab" is used for aeronautical research purposes.

The twin-engine jet will provide more space for experimental hardware than its predecessor, the 737, and is equipped with digital cockpit controls and displays. It serves as a vital research tool in support of the agency's Aviation Safety and Aviation Systems capacity program.

The airplane has been used for several research programs, including:

- Flight tests using Global Position System (GPS) satellite date to perform automated landings of the airplane.
- The study of jet-engine contrails to deter mine their effects on the atmosphere.
- Testing of a system to improve the safety and efficiency of aircraft during landing, taxiing and takeoff by giving pilots a computerized map showing airport ground operations.

Future research will focus on technologies to improve air safety and efficiency, including:

- Evaluation of a system that would provide pilots with better strategic and tactical weather information.
- Testing of an airborne system that allows closely-spaced approaches to landings during reduced visibility to increase airport capacity.
- Runway friction research.

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Experience the cockpit of a Boeing 757! Visitors of all ages can marvel at the cockpit which features accurate details of the inside of this important aeronautical vehicle. Adventurers will view a simulated takeoff and landing through the cockpit's mounted monitor.

Specifications:

color: black

dimensions: 71" high x 96" long x 36" wide (exhibit composed for four components)

crate dimensions: 55"width x 101" length x

37" height, 604 lbs

components: 42 inch flat screen monitor, VCR (ships

separately)

installation: 2 people, 3 hours

value: \$15,600 rental fee: none

transportation: air-ride transportation (borrower

responsible for shipping and insurance)

available for 3 to 4 month loan